

Appl. No. 09/643,316
Response dated 8/9/2004
Reply to Office Action of 4/9/2004

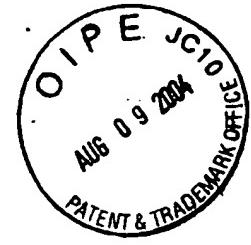
AMENDMENTS TO DRAWINGS

The attached sheets of drawings included changes to Fig.3, Fig. 4 and Fig. 10. Fig. 3 has been amended so that the reference characters in table 302 are unique, i.e., reference characters “350-352”, Fig. 4 has been amended to correct the Category BVs, namely 440, 441 and 442 with the correct values as shown in Table 300 in Fig. 4. Fig. 10 has been amended so the two tables contain proper index labels.

Attachment: Replacement Sheet for Fig. 3

Replacement Sheet for Fig. 4

Replacement Sheet for Fig. 10



300 / Products Table

Product ID	Description	Manufacturer	Category
1	ACME Printer	1	310
2	ACME Computer	1	311
3	Apex Computer	2	312
4	Best Printer	3	313
5	Apex Monitor	2	314

303 / Manufacturers Bit Vector Index

Manufacturer ID	Bit Vector
1	Bit Vector
1	11000
2	00101
3	00010

304 / Categories Bit Vector Index

Category ID	Bit Vector
1	10010
2	01100
3	00001

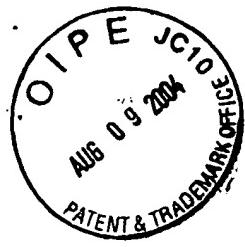
301 / Manufacturers Table

Manufacturer ID	Category ID	Category
1	320	Printer
2	321	Computer
3	322	Monitor

302 / Categories Table

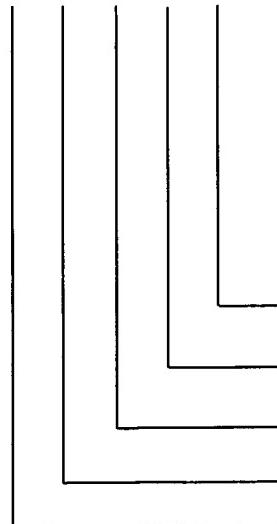
Category ID	Category
1	Printer
2	Computer
3	Monitor

Fig. 3



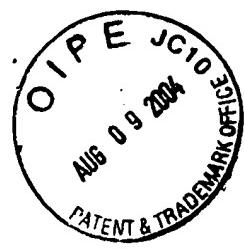
300

Products Table			
Product ID	Description	Manufacturer	Category
1	ACME Printer	1	310
2	ACME Computer	1	311
3	Apex Computer	2	312
4	Best Printer	3	313
5	Apex Monitor	2	314



Product ID	1	2	3	4	5
Indexed Value	1	1	0	0	0
Manufacturer_Indexed	2	0	0	1	0
Category_Indexed	1	0	1	0	0

Fig. 4



1000

CategoryID-to-ManufacturerID Bit Vector Index		
Category ID	Bit Vector	
1	1	0 1014 1
2	1	1 1012 0
3	0	1 0 0

1001

ManufacturerID-to-CategoryID Bit Vector Index		
Manufacturer ID	Bit Vector	
1	1	1 0
2	0	1 1015 1013 1
3	1	0 0

1340

Category ID = 1 1 0 1 1 0

1341

Category ID = 2 0 1 0 0 0

Fig. 10